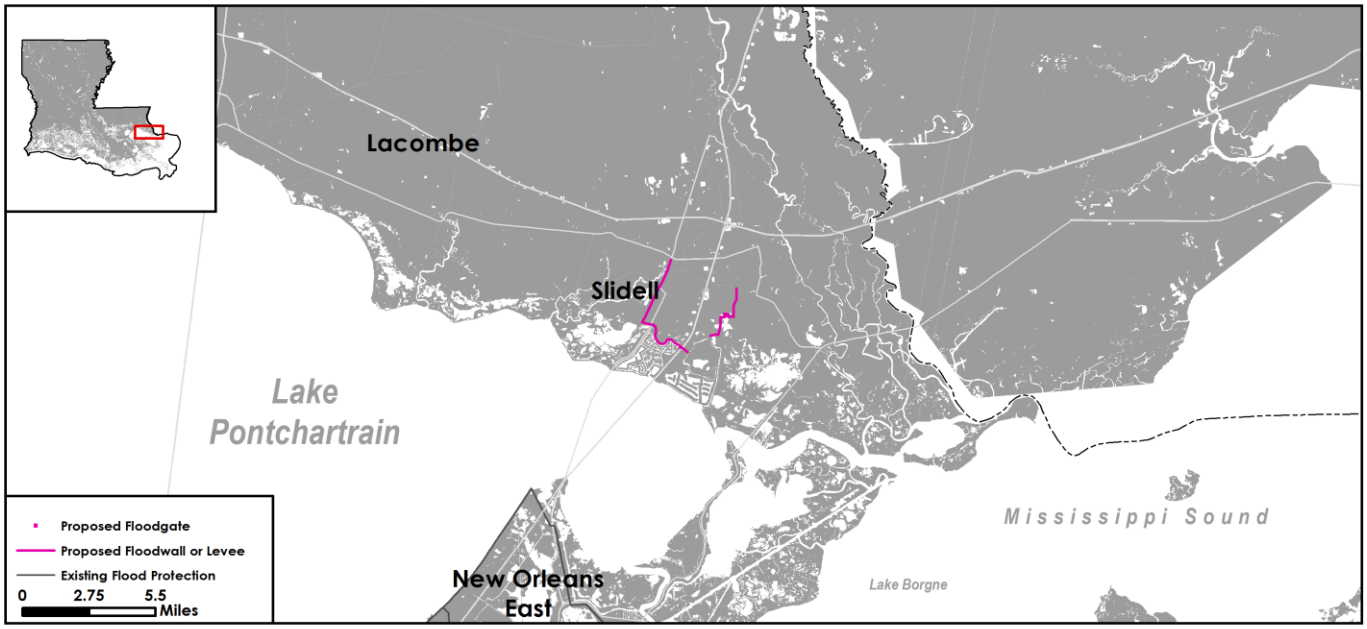
Slidell Ring Levees

Structural Protection

Project ID: 001.HP.13



Description

Construction of a levee to an elevation of 16 feet NAVD88 for storm surge risk reduction around Slidell. Project features approximately 31,000 feet of earthen levee and 14,500 feet of T-wall.

Scale of Influence

Local Sub-basin Basin Regional

Project Location

St. Tammany Parish

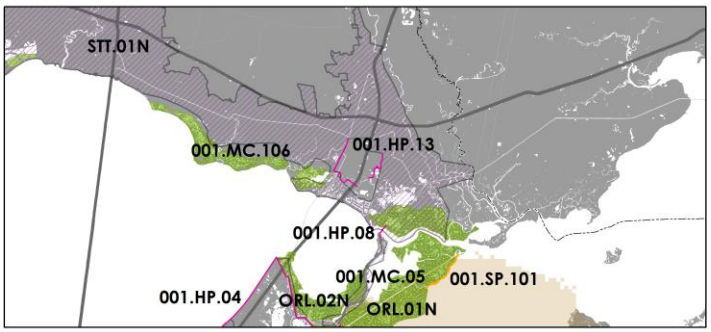
Project Duration

Planning, Engineering, and Design is estimated to take 2 years.
Construction is estimated to take 1 year.

Project Cost Estimate

	Estimated Cost
Planning/Engineering & Design	$20,400,000
Construction	$141,000,000
Operations & Maintenance	$19,900,000
Total	**$181,300,000**

Other Nearby Projects in the Master Plan



Other Project Area Statistics

Estimated Current Population *U.S. Census (2010), U.S. Dept. of Energy Oak Ridge National Laboratory, Land Scan (2011)*	20,000
Percent of Population who are Low-to-Moderate Income *American Community Survey (2006 - 2010)*	41%
Number of Severe Repetitive Loss Properties *Governor's Office of Homeland Security (2015)*	440

2017 Coastal Master Plan
Implementation Period 1

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Economic Damage

Structural protection projects are evaluated by how they reduce Expected Annual Damage (EAD) for a particular area. EAD represents the average direct economic damage projected to result from storm surge flooding events, from Category 1 or greater storms, in any given year, taking into account both the expected damage and the overall frequency of such storms occurring. EAD is a summary measure of the potential damage averaged over the entire distribution of possible flood events. Damage is also summarized at various return periods (DRP), e.g., 100-year damage being the damage with a 1% chance of occurring or being exceeded in a given year. The following are the economic damage summaries for the Future Without Action (FWOA) and Future With Project (FWP) conditions, for the project as a whole (Table 2), and for each Risk Region (Table 3). EAD and DRP values are reported in millions of dollars.

Table 2: Expected Annual Damage

Year	*FWOA*	*FWP*	*Difference*
0	$517 M	-	-
25	$1,255 M	$823 M	**$432 M**
50	$2,688 M	$1,904 M	**$784 M**

Critical Infrastructure

The data in Table 1 was provided by GOHSEP and the Homeland Security Infrastructure Program (HSIP). "Protected" assets are those that otherwise flood in FWOA conditions but are protected by the project.

Table 1: Critical Infrastructure Counts

Asset Type	*Protected*	*Total*
Airport Facility	-	-
Gas Processing	-	-
Government/Military	-	1
Electric Power Substation	-	11
Liquefied Natural Gas Terminal	-	-
Louisiana Offshore Oil Port	-	-
Manufacturing/Chemical	-	3
Electric Power Plant	-	4
Port	-	-
Petroleum Pump Station	-	-
Refinery	-	-
Water and Sewer	1	3
Strategic Petroleum Reserve	-	-
Total	**1**	**22**

Table 3: Economic Damage by Return Period at Year 50

Risk Region	*50 Year*		*100 Year*		*500 Year*	
	FWOA	*FWP*	*FWOA*	*FWP*	*FWOA*	*FWP*
Orleans - Lake Catherine	$340 M	$340 M	$342 M	$342 M	$351 M	$351 M
Orleans - New Orleans	$9,351 M	$9,753 M	$22,629 M	$22,675 M	$47,244 M	$46,173 M
Orleans - Rigolets	$129 M	$130 M	$130 M	$130 M	$130 M	$130 M
St. Tammany	$14,001 M	$14,059 M	$24,531 M	$23,533 M	$34,024 M	$33,931 M
St. Tammany - Slidell	$18,532 M	$4,762 M	$21,568 M	$6,888 M	$25,013 M	$28,982 M
Total	**$42,353 M**	**$29,043 M**	**$69,199 M**	**$53,567 M**	**$106,762 M**	**$109,566 M**